

## **DIGITAL UNDERSAMPLING**

### **ABSTRACT OF THE DISCLOSURE**

A method and system for processing a signal are disclosed. The method comprises: applying an algorithm to selectively negate a plurality of samples of the signal  
5 to provide negated and non-negated samples of the signal, and use the negated and non-negated samples as in-phase (I) and/or quadrature (Q) components of a plurality of complex samples, the algorithm being such that the plurality of complex samples are equivalent to the result that would be obtained by applying an effective sampling function to the signal, and selecting a beat frequency of the effective sampling function by  
10 adjusting the algorithm.